DOCUMENT RESUME

ED 052 713 HE 002 341

AUTHOR	Watley, Donivan J.
TITLE	Black and Nonblack Youth: Finances and College Attendance.
INSTITUTION	National Merit Scholarship Corp., Evanston, Ill.
REPORT NO	NMSC-RR-Vol-7-6
PUB DATE	71
NOTE	21p.
AVAILABLE FROM	Research Division, National Merit Scholarship Corporation, 990 Grove Street, Evanston, Illinois 60201
EDRS PRICE	EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS	*College Attendance, *Financial Support, Higher Education, *Negro Students, *Student Characteristics, Student Loan Programs, *Superior Students

ABSTRACT

Despite the fact that the cost of a college education can be high, over 60% of high school graduates now enter some type of formal post-high school academic program. To find out what financial sources students use to pay for their college education, 28,800 National Merit Scholar Qualifying Test participants were administered a questionnaire. The sample was divided into 72 subgroups formed on the basis of race (black or nonblack), sex, ability level, and geographic region of residence. Although the response rate was low, it justified these tentative conclusions: a substantially higher percentage of blacks were supported by scholarships, federal government aid, and college loans; more blacks had bank loans and worked during the academic year; women received scholarships and federal aid as often as did males; a considerably higher percentage of blacks attended 4-year private institutions; sources of support were related to type of college attended. Regardless of sex or level of parental income, blacks who did not attend college were much more likely than nonblacks to cite lack of funds as the reason; males more often than females and Southerners more often than inhabitants of other regions were more likely to cite lack of funds as the reason they did not pursue a higher education. (JS)

NMSC

1971: volume 7, number 6

Black and Nonblack Youth: Finances and College Attendance

Donivan J. Watley

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

NATIONAL MERIT SCHOLARSHIP CORPORATION

1

NATIONAL MERIT SCHOLARSHIP CORPORATION

Edward C. Smith, President

Donivan J. Watley, Director of Research

The National Merit Scholarship Corporation was founded in 1955 for the purpose of annually identifying and honoring the nation's most talented youth. Merit Scholarships, which are awarded on a competitive basis, provide financial assistance that Scholars use to attend the colleges of their choice.

The NMSC research program was established in 1957 to conduct scholarly research related to the source, identification and development of intellectual talent. NMSC Research Reports are one means of communicating the research program's results to interested individuals.

NMSC research is currently supported by grants from the
National Science Foundation
and the Ford Foundation.

ED052713

ABSTRACT

A college education has become quite costly for the student. The cost of attending a public college or university can be substantial even though much lower than the typical private ones. Yet over 60% of the high school graduates now enter some type of formal post high school academic program. What financial sources do students use to pay for their college education? To investigate this question, 28,800 NMSQT participants were selected to compose 72 subgroups formed on the basis of race (black or nonblack), sex, ability level, and geographical region of residence. Although a higher rate of return of the 1-page questionnaire would have been preferable, a number of tentative conclusions appeared to be justified. Particularly relevant is that clear differences were found between blacks and nonblacks regarding the types of primary sources used to finance their education.

BLACK AND NONBLACK YOUTH:
FINANCES AND COLLEGE ATTENDANCE

Donivan J. Watley

The current financial plight of institutions of higher learning has received wide public attention as costs comtinue to soar. It is estimated that since the mid-1950's the annual expenditures per student has risen two or three times faster than the general cost of living rate. Tuition increases have frequently not been able to keep pace. Squeezed by the money crisis, some colleges have been forced to close their doors and others, even many prestigious private institutions, have seen red ink for the first time in their history. Many states are becoming increasingly unable or unwilling to foot the ballooning bill for public higher education, and private institutions are finding that, in addition to tuition, income from endowment funds and from annual alumni giving are not enough to meet current expenditures.

Yet students are now entering colleges and universities in unprecedented numbers. Approximately 8,200,000 students enrolled at institutions of higher learning for the fall term of 1970, nearly three times as many as in 1955. By 1970 about 78% of this country's 18 year olds were graduating from high school, up 17 percentage points since 1955, and 63% of the graduates were entering some type of formal academic degree program.

But the demands for higher education are costly both to the institution and to the student. The total fees for tuition, room and board at some prestigious colleges and universities now exceed $4,000 a year, and this amount does not nearly cover the full cost shouldered by the institution. Even the cost of attending a tax-supported public campus can be substantial.

A very pertinent question becomes apparent: How are so many students able to pay the bills for an education that is becoming increasingly expensive? While family incomes have risen sharply on the average over the past twenty years, the median income per family in 1967--$8,274 for whites and just $5,151 for nonwhites (U. S. Bureau of the Census, 1969)--was still relatively low in terms of the money needed for a college education. Bayer and Boruch (1969) reported that 55% of the black freshmen who entered all types of institutions in the fall of 1968 had parental incomes under $6,000. Yet, interestingly enough, Watley (1971a) found that a higher percentage of 1967 black participants in the National Merit Scholarship programs entered four-year private institutions than did their nonblack counterparts.

The purpose of this study is to attempt to determine how black and nonblack participants in the National Merit competition finance their college education. In

investigating sources of financial support for college, a number of student characteristics are considered: race, sex, measured academic ability, parental income, geographic region of residence, high school grade average, size of school system, and type of college entered.

METHOD

Samples

Approximately 750,000 high school juniors from about 17,500 high schools voluntarily participate in the annual nationwide scholarship competition conducted by the National Merit Scholarship Corporation (NMSC). About 35,000 of this number are blacks who, in addition to competing for Merit Scholarships, compete also for awards in the National Achievement Scholarship Program for outstanding Negro students. High school officials indicate that virtually all of their test-bright academic achievers take the National Merit Scholarship Qualifying Test (NMSQT).

Samples were chosen from among the 796,650 students who took the NMSQT in 1967 for this study. A total of 28,800 were selected to compose 72 subsamples formed on the basis of race (black or nonblack), sex, ability level, and geographic region of residence; 400 were selected for each sample in order to provide stable results. Each of the 796,650 students was initially classified into a single subgroup based on his particular attributes. The students selected for this study were chosen randomly within each subgroup.

The states included in the four geographic regions (East, Midwest, South, and West) are shown in Figure 1. A large number of states in the Western region were necessary in order to have a sufficient number of blacks to fill the various subsamples.

East	Midwest	South	West
Connecticut	Illinois	Alabama	Alaska
Delaware	Indiana	Florida	Arizona
District of Columbia	Iowa	Georgia	Arkansas
Maine	Michigan	Kentucky	California
Maryland	Minnesota	Louisiana	Colorado
Massachusetts	Missouri	Mississippi	Hawaii
New Hampshire	Ohio	North Carolina	Idaho
New Jersey	Wisconsin	South Carolina	Kansas
New York		Tennessee	Montana
Pennsylvania			Nebraska
Rhode Island			Nevada
Vermont			New Mexico
Virginia			North Dakota
West Virginia			Oklahoma
			Oregon
			South Dakota
			Texas
			Utah
			Washington
			Wyoming

Fig. 1 Regions

Using NMSQT selection scores, three levels of academic ability (or educational development) were used for blacks and six levels for nonblacks. The three levels for blacks corresponded to the top three quarters of the NMSQT selection score distribution for the 1967 black participants; the first level corresponded to the 75-99 quartile, the second level to the 50-74 quartile, and the third to the 25-49 quartile.

Samples of nonblacks were chosen to match those falling in the 25-49 and 50-74 quartiles. However, nonblacks tend to score higher on the NMSQT than the blacks do; about 70% of the nonblacks scored above the 75th percentile of the black selection score distribution. Therefore, while the top quartile of the black distribution included selection scores from 91-170, four levels of scores were used for the nonblacks within this range in order to provide a more adequate picture of the college attendance patterns for them. The top level for the nonblacks included those scoring in the top 10% on the NMSQT selection score distribution for the nonblacks; the second level included the next 10% (80-89); the third level consisted of those whose scores fell in the next 25% on the nonblack distribution (55-79): and the fourth level included nonblacks in the next 25% (30-54). Altogether, then, there were six levels for the nonblacks.

The 72 subsamples that were formed are shown in Figure 2. These samples were representative of the NMSQT participants who had the various attributes under consideration. Although some are requested by their schools to take the NMSQT, the fact that students take the test voluntarily restricts the generaliziability of these results in the sense that the testees are self-selected. While almost all of the high ability students in America take the NMSQT, those with lower academic ability are less likely to take it. Students who scored in the bottom quartile of the NMSQT distribution for blacks were not included in this study because of the increasing difficulty in generalizing about the college attendance patterns as one moves down the NMSQT selection score distribution.

Followup Questionnaire

These students took the NMSQT in the spring of 1967 as high school juniors, so the college attenders normally entered in the fall of 1968. About one year later, in late 1969, each person was asked to complete a 1-page questionnaire that requested information about his post high school experiences. Among the questions asked were: Did you attend college during the 1968-1969 school year? If you attended, to what extent did each of the following sources help finance your first year of college: Employment during college, summer employment, scholarship, personal savings, loans from the college, parental aid, federal government, bank loan. Students were asked

NMSQT SCORE DISTRIBUTION	GEOGRAPHICAL AREA															
	EAST				MIDWEST				SOUTH				WEST			
	Black		Nonblack		Black		Nonblack		Black		Nonblack		Black		Nonblack	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
131-170			400	400			400	400			400	400			400	400
122-130			400	400			400	400			400	400			400	400
106-121			400	400			400	400			400	400			400	400
91-105			400	400			400	400			400	400			400	400
91-170	400	400	1,600	1,600	400	400	1,600	1,600	400	400	1,600	1,600	400	400	1,600	1,600
75-90	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
62-74	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
Total	1,200	1,200	2,400	2,400	1,200	1,200	2,400	2,400	1,200	1,200	2,400	2,400	1,200	1,200	2,400	2,400
	2,400		4,800		2,400		4,800		2,400		4,800		2,400		4,800	

Fig. 2 Design of the College Attendance Study

to mark whether each was a "major source," "minor source," or "not a source." Another question was: If you attended, which college did you enter?

Nonattenders were asked: Did you not attend college because of lack of funds? Those who answered "yes" were asked to indicate how much assistance they need: Enough to pay all expenses; enough to pay about 75% of the expenses; enough to pay about 50% of the expenses; or enough to pay 25% or less of the expenses.

The colleges entered were classified by type: (1) public 2-year, (2) public 4-year, (3) private 2-year, and (4) private 4-year.

Each person was asked to estimate his or her parents' income (before taxes) for the previous year: (1) $4,000 or less; (2) $4,001-$6,000; (3) $6,001-$8,000; (4) $8,001-$10,000; (5) $10,001-$12,000; (6) $12,001-$15,000; (7) $15,001-$20,000; (8) $20,001 or more. This variable was used to represent students socioeconomic status (SES): (a) low--$6,000 or less; (b) moderate--$6,001-$12,000; (c) high--$12,001 or more.

The initial identification of blacks was determined on the basis of whether a student checked on the NMSQT answer sheet that he wished to be considered for an Achievement scholarship. Students were not asked to indicate their race as such on the NMSQT answer sheet. To verify whether students selected for this study had been accurately classified "black" or "nonblack," they were asked to indicate their race on the followup questionnaire. Those who were originally classified incorrectly were changed accordingly to the race they indicated on the questionnaire.

The student addresses used to mail the questionnaires were about two and one-half years old. The addresses available were those on the NMSQT answer sheets obtained in the spring of 1967. Two additional mailings were sent to the nonresponders after the initial mailing of the questionnaire. It is estimated that 2,592 of the participants were not located and did not receive the questionnaire.

Additional Information

Other information was obtained during the NMSQT testing that was used in this study. This included: intention of entering college (yes or no), high school grade average, location of the high school attended, and the population of the area served by the local school system (10,000 or less; 10,000-50,000; 50,000-250,000; 250,000 or more).

RESULTS

Response to Questionnaire

It is estimated that about 9% of the 28,800 mailed questionnaires were not delivered, doubtless due primarily to the fact that current addresses were not available for many of the participants. Of the 17,472 questionnaires presumably received by

nonblacks, 11,207 were returned that contained some usable information. This is a return rate of 64%. A higher percentage of women (68%) than men (59%) provided questionnaire data. With both sexes combined, the return rate was slightly higher in the Midwest (66%) than in the West (64%), East (63%), or South (61%).

Questionnaire response rate was related to students NMSQT selection scores. It was highest for those scoring in the 131-170 range and lowest for those scoring in the 62-74 range. For example, the response rate for all nonblack women in the 131-170 range was 84% but only 43% for those in the 62-74 range. The corresponding percentages for nonblack men were 75 and 40. Major attention in this analysis, therefore, will be given to those who obtained relatively higher NMSQT selection scores. The results for students at the lower end of the NMSQT distribution will necessarily be interpreted very cautiously.

Only 52% of the blacks returned usable data. Thus these results too will require careful interpretation. As was found for nonblacks, the return rate was higher for women than for men--57% to 46%; but unlike the nonblacks, the rate of return was higher for both sexes combined in the South (57%) than in the other geographic areas (West 52%; East 50%; Midwest 47%). The return rate for blacks was related to NMSQT scores, the rate being best for those who obtained relatively higher NMSQT scores. For example, 62% of all black women in the 91-170 range returned questionnaires, while only 50% of those in the 62-74 range did so. The corresponding rates for the men were 52% and 41%.

Information obtained from relatives revealed that 14 of the participants selected for this study were deceased. Other information received indicated that 337 of the participants were high school sophomores rather than juniors when they took the NMSQT. These subjects were removed from the investigation since the study was restricted to eleventh graders who normally entered college for the first time in the fall of 1968.

Questionnaire information about race was needed to verify the initial placement of students into black and nonblack categories. Of those initially thought to be black on the basis of the NMSQT answer sheet, 128 men and 62 women indicated on the followup questionnaire that they were not black. They were transferred from the "black" to the "nonblack" category. On the other hand, 23 men and 57 women initially selected as nonblack participants indicated on the questionnaire that they were black so the appropriate transfer was made.

College Attenders: Sources of Financial Support

An earlier report (Watley, 1971a) suggested that the black and nonblack college attenders in this study differed considerably in the financing of their college educations. It appeared that intensive recruiting was conducted to enroll the blacks

who scored highest on the NMSQT. Interestingly, while blacks did not enter their eleventh grade top college choices as frequently as nonblacks did, they nevertheless entered 4-year private institutions much more frequently than their nonblack counterparts. Private colleges and universities are generally more costly to attend.

Tables 1 and 2 provide data about these students major sources of financial support for their first year of college. Minor sources were not considered in this analysis. Overall, the totals in these two tables indicate that the blacks and nonblacks, both males and females, differed significantly on each source. In general, a substantially higher percentage of blacks than nonblacks had scholarships, federal government aid, and college loans. Although the differences are not as great, a higher percentage of them also had bank loans and more worked during the academic year. On the other hand, nonblacks much more frequently than blacks relied on parental aid to pay their bills; summer employment and savings were also more frequent sources of support for them than for black students. As would be expected, parental income is highly related to the proportions of students of each race who relied heavily on the various other means of financial support.

Overall, the women of each race received scholarship aid just about as frequently as their male counterparts did. They also got aid from the federal government about as often as the men. However, women more often than men reported aid from their parents as a major source, while the men more frequently used summer earnings as a major course for supporting their education.

Even a brief look at Tables 1 and 2 reveals clues to the reason for the racial differences observed previously (Watley, 1971a) in the proportions who entered private and public institutions. Over half (52%) of the black men who scored in the top quartile of their own NMSQT selection score distribution (in the 91-170 range) had scholarships to pay a major portion of their expenses, and a third in the second quartile (75-94 range) reported having this source of support. The comparable percentages for nonblack men were only 27 and 9. Only 39% of the nonblacks scoring in the top 10% of the NMSQT score distribution (131-170 range) for nonblacks had major scholarship aid--students who would generally be recognized as among the very cream of the crop of test-bright academic achievers.

Sources of Support and Type of College Entered

Let us now turn more specifically to the question of how students in the various types of institutions supported themselves financially.

Tables 3 and 4 immediately indicate that scholarships and federal government aid were two major reasons why such a high percentage of blacks were able to attend 4-year private colleges. Altogether, 53% of the black men and 48% of the black women

Table 1

The Number of Male Attenders With Different Characteristics and the Percent Who Used Each of These Sources to Finance Their College Education

Ability Level	SES	N		Financial Sources: Work during College		Summer Work		Scholarship		Savings		College Loan		Parental Aid		Federal Aid		Bank Loan	
		Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black
131-170	Low	-	79	-	15	-	41	-	67	-	18	-	10	-	28	-	32	-	4
	Mod	-	375	-	12	-	38	-	53	-	15	-	7	-	52	-	17	-	11
	High	-	572	-	4	-	20	-	26	-	10	-	3	-	80	-	5	-	5
	Total	-	1,026	-	7	-	28	-	39	-	12	-	5	-	66	-	12	-	7
122-130	Low	-	102	-	9	-	32	-	48	-	15	-	13	-	29	-	38	-	7
	Mod	-	383	-	11	-	39	-	37	-	17	-	6	-	48	-	17	-	9
	High	-	433	-	5	-	23	-	15	-	12	-	1	-	77	-	5	-	7
	Total	-	918	-	8	-	31	-	28	-	15	-	5	-	60	-	14	-	8
106-121	Low	-	100	-	18	-	42	-	40	-	19	-	12	-	29	-	24	-	10
	Mod	-	411	-	10	-	40	-	27	-	15	-	4	-	50	-	11	-	7
	High	-	344	-	7	-	27	-	13	-	13	-	1	-	74	-	6	-	7
	Total	-	855	-	10	-	35	-	23	-	14	-	4	-	57	-	10	-	7
91-105	Low	-	106	-	18	-	38	-	31	-	17	-	8	-	37	-	25	-	8
	Mod	-	396	-	14	-	43	-	17	-	18	-	3	-	44	-	12	-	8
	High	-	261	-	10	-	29	-	6	-	10	-	-	-	69	-	3	-	7
	Total	-	763	-	13	-	38	-	15	-	15	-	3	-	51	-	11	-	7
91-170	Low	225	387	16	15	21	38***	59	45***	4	17***	19	11**	14	31***	39	30*	6	7
	Mod	275	1,565	11	12	19	40***	55	33***	6	16***	11	5***	40	48*	24	14***	12	9
	High	131	1,610	6	6	19	24	34	17***	8	11	5	1**	63	76***	11	5**	12	6**
	Total	631	3,562	12	9*	20	32***	52	27***	6	14***	13	4***	36	59***	27	12***	10	7*
75-90	Low	240	73	18	15	24	38*	39	14***	10	21*	28	15*	19	34**	32	22	6	15*
	Mod	181	318	12	15	33	43*	28	10***	11	17	11	2***	43	47	23	7***	11	9
	High	55	185	11	8	25	27	22	5***	9	9	4	2	60	68	9	7	18	4***
	Total	476	576	15	13	28	38***	33	9***	10	15*	18	3***	33	52***	26	9***	9	8
62-74	Low	243	87	17	24	25	49***	26	14*	8	22***	21	7**	21	30	28	15*	11	10
	Mod	184	221	19	19	29	43**	16	11	14	20	13	3***	42	43	18	8**	12	10
	High	34	113	21	12	38	32	3	4	6	12	3	1	62	66	6	1	18	4**
	Total	461	421	18	18	28	41***	21	10***	10	18***	16	3***	33	47***	22	7***	12	8
Total	Low	708	547	17	16	24	40***	41	36	7	18***	23	11***	18	31***	33	26*	8	9
	Mod	640	2,104	13	13	26	41***	36	27***	10	17***	11	4***	42	47**	22	12***	11	9
	High	220	1,908	10	6	24	25	26	15***	8	11	5	1**	62	75***	10	5**	15	6***
	Total	1,568	4,559	15	11***	24	34***	37	23***	8	14***	16	4***	34	57***	25	11***	10	8***

Note.--Comparisons were made in each cell between the percentages reported for blacks and nonblacks (Tables 1-7); the differences that are statistically significant have this designation: * = p .05 level; ** = p .01 level; *** = p .001 level.

Table 2

The Number of Female Attenders With Different Characteristics and the Percent Who Used Each of These Sources to Finance Their College Education

Ability Level	SES	N		Financial Sources: Work during College		Summer Work		Scholarship		Savings		College Loan		Parental Aid		Federal Aid		Bank Loan	
		Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black
131-170	Low	-	97	-	8	-	14	-	75	-	11	-	19	-	20	-	43	-	6
	Mod	-	422	-	7	-	20	-	50	-	11	-	5	-	59	-	13	-	7
	High	-	634	-	3	-	10	-	20	-	7	-	3	-	88	-	3	-	6
	Total	-	1,153	-	5	-	14	-	36	-	9	-	5	-	72	-	10	-	6
122-130	Low	-	96	-	11	-	25	-	51	-	9	-	9	-	31	-	42	-	5
	Mod	-	470	-	10	-	22	-	39	-	13	-	4	-	54	-	16	-	8
	High	-	473	-	2	-	10	-	14	-	8	-	1	-	85	-	6	-	7
	Total	-	1,039	-	7	-	17	-	29	-	10	-	3	-	66	-	14	-	7
106-121	Low	-	133	-	17	-	26	-	41	-	13	-	13	-	26	-	35	-	9
	Mod	-	445	-	8	-	20	-	31	-	10	-	5	-	63	-	15	-	8
	High	-	369	-	3	-	12	-	8	-	6	-	2	-	86	-	4	-	8
	Total	-	947	-	7	-	17	-	23	-	9	-	5	-	67	-	14	-	8
91-105	Low	-	146	-	14	-	24	-	32	-	11	-	13	-	32	-	30	-	7
	Mod	-	366	-	10	-	22	-	17	-	16	-	5	-	60	-	12	-	7
	High	-	268	-	6	-	11	-	6	-	6	-	-	-	83	-	7	-	7
	Total	-	780	-	9	-	19	-	16	-	11	-	5	-	63	-	13	-	7
91-170	Low	296	472	10	13	13	23***	60	47***	6	11*	20	13*	20	28*	40	37	6	7
	Mod	347	1,703	10	9	13	21***	46	35***	6	12***	14	5***	50	59**	29	14***	7	8
	High	130	1,744	3	3	8	11	31	14***	5	7	3	2	80	86*	9	5*	11	7
	Total	773	3,919	9	7	12	17***	49	27***	6	10***	15	5***	43	67***	30	13***	7	7
75-90	Low	307	111	15	21	13	28***	34	23*	5	16***	27	13**	25	33	36	24*	8	10
	Mod	270	276	11	13	18	27*	28	16***	8	16**	13	5**	49	55	16	14	15	9*
	High	75	191	11	7	13	10	17	6**	5	5	9	1***	71	88***	12	2***	13	6*
	Total	652	578	13	13	15	21**	29	14***	6	12***	19	5***	40	62***	25	12***	12	8*
62-74	Low	293	75	25	16	20	19	23	16	8	12	30	13**	31	39	29	21	8	3
	Mod	209	193	10	13	16	26*	22	11**	10	16	12	6*	57	64	21	12*	13	8
	High	40	90	8	10	15	11	8	4	3	8	3	-	83	80	8	3	10	6
	Total	542	358	18	13*	18	21	21	11***	8	13*	21	6***	45	63***	24	12***	10	6
Total	Low	896	658	17	15	15	23***	39	39	6	12***	26	13***	25	30*	35	33	7	7
	Mod	826	2,172	10	10	15	22***	34	31	7	13***	13	5***	51	59***	22	14***	11	8**
	High	245	2,025	6	4	11	11	23	12***	4	7	5	2***	78	86***	10	4***	11	7**
	Total	1,967	4,855	13	8***	15	17**	35	24***	7	10***	18	5***	43	66***	27	12***	9	7**

Table 3

The Number of Males With Different Characteristics in the Various Types of Colleges and the Percent Who Used Each of These Sources to Finance Their Education

College Type	SES	N		Financial Sources: Work during College		Summer Work		Scholarship		Savings		College Loan		Parental Aid		Federal Aid		Bank Loan	
		Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black
4-Yr Public	Low	353	306	14	14	25	41***	34	37	7	21***	26	11***	20	27	32	27	7	9
	Mod	298	1,155	11	11	30	41***	26	22	11	16*	11	3***	44	47	22	11***	8	7
	High	95	896	8	7	24	29	19	12*	12	12	7	1***	62	71	12	6*	15	4***
	Total	746	2,357	12	10	27	37***	29	20***	9	15***	18	3***	35	53***	25	12***	8	6*
4-Yr Private	Low	254	143	13	13	15	35***	57	50	6	14**	24	15	13	34***	42	34	11	8
	Mod	252	552	8	8	18	35***	57	49*	6	16***	13	9*	41	56***	25	18*	18	15
	High	110	815	5	3	17	18	35	21***	5	9	3	2	69	84***	10	5*	15	8*
	Total	616	1,510	10	5***	17	26***	53	34***	6	12***	16	6***	35	69***	29	12***	15	11*
2-Yr Public	Low	81	77	43	29	46	43	20	16	14	16	7	5	25	42*	9	9	4	8
	Mod	75	332	39	28	36	47	8	11	15	19	3	1	35	37	8	4	5	6
	High	14	161	43	24	64	37*	7	8	-	14	-	1	14	52**	-	1	-	2
	Total	170	570	41	27***	43	44	14	11	13	17	5	1**	28	42**	8	4*	4	5
2-Yr Private	Low	9	12	11	25	11	50	56	-**	11	8	11	-	22	25	44	33	-	33
	Mod	4	37	25	8	-	43	-	14	-	11	75	3***	-	41	50	19	-	3
	High	0	22	-	-	-	9	-	5	-	-	-	-	-	86	-	-	-	9
	Total	13	71	15	8	8	34	38	8**	8	7	31	1***	15	52*	46	15*	-	10
Total	Low	697	538	17	16	24	40***	41	37	7	18***	23	11***	18	31***	33	27*	8	9
	Mod	629	2,076	14	13	26	41***	36	27***	9	17***	11	4***	42	48**	22	12***	12	9*
	High	219	1,894	9	6	23	25	26	15***	8	11	5	1**	63	75***	10	5**	14	6***
	Total	1,545	4,508	15	10***	24	34***	37	23***	8	14***	16	4***	34	57***	25	11***	10	8***

Table 4

The Number of Females With Different Characteristics in the Various Types of Colleges and the Percent Who Used Each of These Sources to Finance Their Education

College Type	SES	N		Financial Sources															
				Work during College		Summer Work		Scholarship		Savings		College Loan		Parental Aid		Federal Aid		Bank Loan	
		Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black
4-Yr Public	Low	461	339	13	13	16	24**	33	40*	8	12	30	12***	28	33	31	30	7	8
	Mod	425	1,270	9	9	17	23*	26	27	9	14*	13	4***	55	60	20	11***	11	8
	High	105	990	7	4	15	13	13	10	8	8	8	1***	76	85*	6	4	11	5**
	Total	991	2,599	11	7***	16	19*	28	22***	8	11**	20	4***	45	66***	23	11***	9	7*
4-Yr Private	Low	300	174	13	7	10	14	55	58	4	10**	25	21	18	24	48	49	9	10
	Mod	296	551	6	7	10	19**	52	45	4	11***	16	7***	49	60**	30	23*	15	9**
	High	116	836	2	2	4	7	34	17***	2	5	3	3	81	90**	14	5***	12	9
	Total	712	1,561	8	5***	9	12*	51	32***	3	8***	18	7***	41	72***	35	16***	12	9
2-Yr Public	Low	113	122	38	33	28	33	22	16	9	15	12	4*	33	30	19	20	5	2
	Mod	93	280	28	20	22	28	15	19	11	15	5	4	44	53	10	9	1	4
	High	20	153	25	16	20	16	5	7	5	5	-	-	65	73	-	1	-	3
	Total	226	555	33	22**	25	26	18	15	9	12	8	3**	40	53***	13	9	3	3
2-Yr Private	Low	15	18	40	-**	13	17	27	6	-	22	27	11	27	39	27	22	7	-
	Mod	4	58	-	3	25	17	25	29	25	9	25	9	25	57	50	16	25	9
	High	4	34	25	-**	25	3	25	3	-	6	-	-	75	88	50	-***	50	15
	Total	23	110	30	2***	17	13	26	17	4	10	22	6*	35	64*	35	12**	17	9
Total	Low	889	653	17	15	15	23***	39	40	6	12***	26	13***	25	30*	35	33	7	7*
	Mod	818	2,159	10	10	15	22***	34	30	7	13***	13	5***	51	59***	22	14***	11	8**
	High	245	2,013	6	4	11	11	23	12***	5	7	5	2***	78	86***	10	4***	11	7**
	Total	1,952	4,825	13	8***	15	17**	35	24***	7	10***	18	5***	43	66***	27	13***	9	7**

who obtained NMSQT selection scores in the top quarter of their own distribution (91-170 range) attended an institution of this type; the comparable figures for nonblacks were 37% and 36% for those scoring in this NMSQT range (Watley, 1971a). Over half of the blacks in 4-year private colleges and universities listed scholarships as a major source of support, and about a third received major aid from the federal government. The percentages for nonblacks were not nearly that high.

These tables show consistent differences among the races in each type of institution. Different patterns can also be seen for students who attended 4-year vs. 2-year colleges.

Differences can be noted in each type of institution regarding how the proportions of men and women of each race supported themselves. Thus, in addition to race, sex differences were also found, especially in connection with the percentages who received major aid from their parents.

Nonattenders and Lack of Funds

Taking into account parental income and region of residence, Table 5 shows the percentages of black and nonblack nonattenders who did not attend college because of a lack of funds. The results are somewhat different for the men and the women.

First, black nonattenders, regardless of sex or level of parental income, who supplied questionnaire information were much more likely than nonblacks to report that they were unable to go to college because of a shortage of funds. As would be expected, however, those whose parents earned less than $6,000 were more likely to pinpoint this as the reason they did not go, but even a high percentage of those, particularly blacks, whose parents were in the $6,001-$12,000 bracket indicated that they did not have the money to attend. Moreover, although the number involved was relatively small (N=19), 63% of the black women whose parents made more than $12,000 said they needed money in order to go.

Males in the various parental income brackets were more apt to state that they lacked sufficient money to attend than were their female counterparts. While virtually all of the National Merit participants indicate as eleventh graders that they want to attend college, women are apparently somewhat more likely than men to change their plans about going. One thing that appears to have a clear effect on the college attendance of women is marriage (Watley, 1971b); a higher percentage of them are married than is the case for men, and a married woman is even less likely to attend college than is a married man.

Of the different geographic regions, Southerners more often than the inhabitants of other areas said that they did not attend college because of a lack of funds.

Table 5

The Number of Participants with Different Characteristics who did not Attend College and the Percent who Could not Attend because of a Lack of Funds

		Geographic Regions																	
		East				Midwest				South				West				Total	
		Black		Nonblack		Black		Nonblack		Black		Nonblack		Black		Nonblack		Black	Nonblack
Sex	Parental Income	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N %	N %
Males	Low	27	89	21	52**	13	85	23	70	46	87	10	80	17	82	23	70	103 86	77 66**
	Mod	21	76	51	43*	18	67	55	49	14	79	31	58	8	75	49	37*	61 74	186 46***
	High	5	-	21	5	3	33	22	36	-		15	53	3	-	22	32	11 9	80 30
	Total	53	75	93	37***	34	71	100	51*	60	85	56	61**	28	71	94	44**	175 77	343 47***
Females	Low	34	68	41	56	36	72	18	39*	86	87	40	55***	37	81	50	64	193 80	149 56***
	Mod	29	55	85	36	23	61	99	36*	19	74	52	38**	11	55	63	51	82 61	299 40***
	High	8	75	29	10***	6	67	42	31	3	33	20	20	2	50	22	18	19 63	113 21***
	Total	71	63	155	37***	65	68	159	35***	108	83	112	41***	50	74	135	50**	294 73	561 40***

Table 6

The Number of Participants with Different Characteristics who did not Attend College and the Percent who Could not Attend because of a Lack of Funds

		High School Grade Average															
		B+ to A				C+ to B				C and Below				Total			
		Black		Nonblack		Black		Nonblack		Black		Nonblack		Black		Nonblack	
Sex	Parental Income	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Males	Low	9	89	6	100	64	88	39	69*	28	86	29	62*	101	87	74	69**
	Mod	6	83	23	48	27	70	92	48*	26	77	63	38***	59	75	178	44***
	High	1	-	9	11	6	-	39	31	4	25	28	36	11	9	76	30
	Total	16	81	38	47*	97	77	170	49***	58	78	120	43***	171	78	328	47***
Females	Low	43	79	47	51**	99	84	73	58***	43	72	24	63	185	80	144	56***
	Mod	13	77	77	44*	48	56	165	40*	20	60	51	35	81	60	293	40**
	High	5	80	20	10**	8	50	72	22	5	60	17	29	18	61	109	21***
	Total	61	79	144	42***	155	74	310	40***	68	68	92	41**	284	73	546	41***

In general, high school grade average was unrelated to nonattendance because of a shortage of funds (Table 6). Although the differences between blacks and nonblacks are clearly evident, a male student with a C or below average was just as apt to indicate that he did not attend because of the unavailability of funds as a B+ to A student was. This was true also for nonblack women. Only in the case of black women did there appear to be a relationship between a lack of funds and grade average, but even here it was not a strong one.

Another analysis did not reveal consistent patterns between the population served by a school system and nonattendance due to a problem with not enough funds.

If students don't attend college because of a lack of funds, how much financial assistance do they need? Apparently most of the nonattenders in this study would need quite a lot, although the amount required depends, as would be expected, on the income of one's parents. Regardless of how much their parents earned, however, almost all of the nonattenders who responded to this questionnaire said they needed at least enough to pay for half of their expenses (Table 7). And some needed much more.

Table 7

The Number and Percent of Nonattenders with Different Characteristics Who Reported Needing Various Amounts of Financial Assistance to be Able to Attend

		Parental Income											
		$6,000 or Below				$6,001-$12,000				$12,001 or Higher				Total			
		Black		Nonblack		Black		Nonblack		Black		Nonblack		Black		Nonblack	
Sex	Amount of Assistance Needed	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Males	25% or less of expenses	2	2	3	6	-		2	2	-		3	13	2	1	8	5
	50% of expenses	18	20	10	20	19	42	38	45	-		13	54	37	27	61	39*
	75% of expenses	35	39	22	45	16	36	28	33	1	100	7	29	52	39	57	36
	All expenses	34	38	14	29	10	22	17	20	-		1	4	44	33	32	20*
Females	25% or less of expenses	5	3	2	2	1	2	2	2	1	9	-		7	3	4	2
	50% of expenses	29	19	13	16	16	32	41	35	4	36	10	43	49	23	64	29
	75% of expenses	53	35	38	46	21	42	51	44	2	18	8	35	76	36	97	44
	All expenses	64	42	29	35	12	24	23	20	4	36	5	22	80	38	57	26**

SUMMARY

The objective of this study was to learn how participants in the programs of National Merit finance their college education, and to obtain information about those who are not able to go because of a lack of funds. The results require careful interpretation because many participants selected for the study did not complete the questionnaire. Nonblacks provided information about themselves more frequently than blacks did, and higher scorers on the NMSQT returned the questionnaire more often than the lower scorers did. The response rate was sufficiently high, however, to justify these tentative conclusions:

1. A substantially higher percentage of blacks than nonblacks supported their education through scholarships, federal government aid, and college loans, and, although the differences were not as great, more of them had bank loans and more worked during the academic year. Nonblacks much more frequently than blacks relied on parental aid; summer employment and savings were also more frequent major sources of support for them than for blacks.
2. Women received scholarships and aid from the federal government as often as their male counterparts did.
3. A considerably higher percentage of blacks than nonblacks attended 4-year private institutions, apparently made possible because many more blacks received major financial support from scholarships and from federal government aid.
4. Sources of financial support are related to the type of college attended.
5. Regardless of sex or level of parental income, blacks who did not attend college were much more likely than nonblacks to indicate that the reason for their nonattendance was lack of funds.
6. Males more often than females pinpointed a shortage of money as the reason they did not attend a college or university, and Southerners were more likely than the inhabitants of other geographic regions to say that they could not go because of money problems.

DISCUSSION

In addition to this investigation of students' sources of financial support, two other reports have been completed using this body of data. The first (Watley, 1971a) focused on students' characteristics and college attendance patterns. The main conclusion was that there now appears to be very few test-bright, academically successful students who do not attend an institution of higher learning, suggesting that the situation has changed since the 1950's when relatively large numbers of academic "brains" were found not to be attending college (e.g., Wolfle, 1954). The second (Watley, 1971b) found that more women than men were married, and that a married woman was much less likely to have entered college during the year following high school graduation than her male counterpart.

These three studies have one common problem: many participants selected did not respond to the 1-page questionnaire they received. And it is difficult to say who

the nonresponders are. Was nonresponse, for example, more likely to occur among those who could not report that they were enrolled in a college? Unfortunately, a further investigation of the nonresponders was not possible. While it is known that black nonwinners in the programs of National Merit are now less apt to provide followup information about themselves than are white nonwinners, Burgdorf (1969) found that black nonresponders to an Achievement questionnaire deviated from the original responders "only slightly and in the expected direction" (p. 10).

Some of the nonresponse problem has been avoided by concentrating in these studies on the higher scorers on the NMSQT, where the return rate was relatively high. And nonresponse may have had less affect on some analyses than on others--where a systematic response bias did not appear to be involved (e.g., returns from married college attenders versus single attenders).

Certainly the direction of the results obtained in the present study is pronounced and systematic regarding the different ways that black and nonblack students find to finance their collegiate programs. It is unlikely that the directions of these differences would be substantially affected by additional data from the nonresponders, doubtless many of whom were not college attenders.

REFERENCES

Bayer, A. E., & Boruch, R. F. The black student in American colleges. Washington, DC: American Council on Education, 1969.

Burgdorf, K. Outstanding Negro high school students: A one-year followup. Evanston, IL: NMSC Research Reports, 1969, 5, No. 4.

U. S. Bureau of the Census. Statistical abstract of the United States: 1969 (90th ed.). Washington, DC: U. S. Government Printing Office, 1969.

Watley, D. J. Black and nonblack youth: Characteristics and college attendance patterns. Evanston, IL: NMSC Research Reports, 1971, 7, No. 4. (a)

Watley, D. J. Black and nonblack youth: Does marriage hinder college attendance? Evanston, IL: NMSC Research Reports, 1971, 7, No. 5. (b)

Wolfle, D. America's resources of specialized talent. New York: Harper, 1954.

PREVIOUS NMSC RESEARCH REPORTS

Number

Volume 1, 1965

NMSC Research Reports included in this volume are listed in the Review of Research, 1970, 6, No. 1.

Volume 2, 1966

NMSC Research Reports included in this volume are listed in the Review of Research, 1970, 6, No. 1.

Volume 3, 1967

1. Do Counselors Know When to Use Their Heads Instead of the Formula?, by D. J. Watley (also in Journal of Counseling Psychology, 1968, 15, 84-88).
2. Paternal Influence on Career Choice, by C. E. Werts, (also in Journal of Counseling Psychology, 1968, 15, 48-52).
3. The Effects of Feedback Training on Accuracy of Judgments, by D. J. Watley (also in Journal of Counseling Psychology, 1968, 15, 167-272).
4. Study of College Environments Using Path Analysis, by C. E. Werts.
5. Effects of Offers of Financial Assistance on the College-Going Decisions of Talented Students with Limited Financial Means, by N. C. Crawford, Jr.

Volume 4, 1968

1. Career Progress of Merit Scholars, by D. J. Watley (also in Journal of Counseling Psychology, 1969, 16, 100-108).
2. Stability of Career Choices of Talented Youth, by D. J. Watley.

Volume 5, 1969

1. Career Decisions of Talented Youth: Trends over the Past Decade, by D. J. Watley and R. C. Nichols.
2. Analyzing College Effects: Correlation vs. Regression, by C. E. Werts and D. J. Watley (also in American Educational Research Journal, 1968, 5, 585-598).
3. A Student's Dilemma: Big Fish--Little Pond or Little Fish--Big Pond, by C. E. Werts and D. J. Watley (also in Journal of Counseling Psychology, 1969, 16, 14-19).
4. Outstanding Negro High School Students: A One-Year Followup, by K. Burgdorf.
5. Where the Brains Are, by R. C. Nichols.
6. Selecting Talented Negro Students: Nominations vs. Test Performance, by W. S. Blumenfeld.

Number

7. Career or Marriage?: A Longitudinal Study of Able Young Women, by D. J. Watley (also, Career or Marriage?: Aspirations and Achievements of Able Young Women, by D. J. Watley and Rosalyn Kaplan in Journal of Vocational Behavior, 1971, 1, 29-43).
8. Career Selection: Turnover Analysis and the Birds of a Feather Theory, by D. J. Watley and C. E. Werts (also in Journal of Counseling Psychology, 1969, 16, 254-259).

Volume 6, 1970

1. Review of Research, by the NMSC Research Staff (includes abstracts of all previous NMSC studies).
2. Able Black Americans in College: Entry and Freshman Experiences, by F. H. Borgen
3. Merit Scholars and the Fulfillment of Promise, by D. J. Watley and Rosalyn Kaplan.
4. Paternal Influence on Talent Development, by C. E. Werts and D. J. Watley.
5. Progress of Merit Scholars: Does Religious Background Matter?, by D. J. Watley and Rosalyn Kaplan.

Volume 7, 1971

1. Brain Gains and Brain Drains: The Migration of Black and Nonblack Talent, by D. J. Watley.
2. Differential Expectations? Predicting Grades for Black Students in Five Types of Colleges, by F. H. Borgen.
3. Characteristics and Performance of NMSQT Participants, by D. J. Watley.
4. Black and Nonblack Youth: Characteristics and College Attendance Patterns, by D. J. Watley.
5. Black and Nonblack Youth: Does Marriage Hinder College Attendance?, by D. J. Watley.
6. Black and Nonblack Youth: Finances and College Attendance, by D. J. Watley.

Available NMSC Research Reports may be obtained by writing to the Research Division, National Merit Scholarship Corporation, 990 Grove Street, Evanston, Illinois 60201